CLAIMS

1. A display device for terrain anticollision equipment (1) carried onboard an aircraft (A) detecting the risks of collision of the aircraft (A) with the terrain (Rf) and/or ground obstacles by comparison, of at least one protection envelope (EC, EW) constructed around the short term predicted trajectory of the aircraft, with a representation of an envelope of the terrain and/or of the ground obstacles overflown and by detection of the intrusion, into the said protection envelope or envelopes, of the terrain and/or of the ground obstacles overflown, the said display device displaying, on one or more screens (6) installed onboard, an image representing in at least two dimensions of the envelope of the terrain and/or of the obstacles, in the form of superposed slices (S1, S2, S3, S4, S5) assigned false colors and/or various textures and/or symbols referenced with respect to a reference display altitude (RefAlt), and
being characterized in that it comprises: means for adjustment that vary the reference display altitude (RefAlt(t)) when a risk of terrain collision is detected, with respect to an altitude related to the instantaneous altitude (a/c alt(t)) of the aircraft and/or with respect to a short term predicted altitude for the aircraft (predicted a/c alt(t)).

2. The device as claimed in claim 1, characterized in that the means for adjustment of the reference display altitude switch instantaneously, at the moment of the detection of a risk of terrain collision, between the value of the altitude related to the short term predicted altitude for the aircraft (predicted a/c alt(Tw)) and the instantaneous altitude (a/c alt(t)) of the

aircraft.

3. The device as claimed in claim 2, characterized in that the switching is triggered at the start of a next cycle of refreshing of the image on the screen or is displayed the image.

4. The device as claimed in claim 1, characterized in that the means for adjustment of the reference display altitude provide for a gentle transition, onward of the moment of the detection of a risk of terrain collision, between the value of the short term predicted altitude for the aircraft (predicted a/c alt(Tw)) and the altitude related to the altitude (a/c alt(t)) of the aircraft.

5. The device as claimed in claim 1, characterized in that the means for adjustment of the reference display altitude initially give the latter, at the moment of the detection of a risk of terrain collision, the value of the short term predicted altitude for the aircraft (predicted a/c alt(Tw)).

6. The device as claimed in claim 1, characterized in that, when the aircraft was climbing or holding level at the moment of the detection of a risk of terrain collision and maintains or accentuates its climb after the detection of the risk of terrain collision, the means for adjustment of the reference display altitude fix the value of the reference display altitude (RefAlt(t)) at its value at the moment (RefAlt(min)).

7. The device as claimed in claim 1, characterized in that, when the aircraft was climbing or holding level at the moment of the detection of a risk of terrain collision and attenuates its climb after the detection of the risk of terrain collision, the means for adjustment of the reference display

altitude slave the reference display value (RefAlt(t)) to the value of the short term predicted altitude for the aircraft (predicted a/c alt(t)).

8. The device as claimed in claim 1, characterized in that, when the aircraft was climbing or holding level at the moment of the detection of a risk of terrain collision and begins to descend, the means for adjustment of the reference display altitude slave the value of the reference display altitude (RefAlt(t)) to the instantaneous value of the altitude of the aircraft (a/c alt(t)).

9. The device as claimed in claim 1, characterized in that, when the aircraft was climbing or holding level at the moment of the detection of a risk of terrain collision and when its instantaneous altitude (a/c alt(t)) becomes greater than the last value taken by the reference display altitude (RefAlt(min)), the means for adjustment of the reference display altitude slave the value of the reference display altitude (RefAlt(t)) to the instantaneous value of the altitude of the aircraft (a/c alt(t)).

10. The device as claimed in claim 1, characterized in that, when the aircraft was descending at the moment of the detection of a risk of terrain collision and accentuates its descent after the detection of the risk of terrain collision, the means for adjustment of the reference display altitude slave the value of the reference display altitude (RefAlt(t)) to the value of the short term predicted altitude for the aircraft (predicted a/c alt(t)).

11. The device as claimed in claim 1, characterized in that, when the aircraft was descending at the

moment of the detection of a risk of terrain collision and attenuates its descent after the detection of the risk of terrain collision, the means for adjustment of the reference display altitude slave the reference display value (RefAlt(t)) to the value of the short term predicted altitude of the aircraft (predicted a/c alt(t)).

12. The device as claimed in claim 1, characterized in that, when the aircraft was descending at the moment of the detection of a risk of terrain collision and begins to climb, the means for adjustment of the reference display altitude slave the value of the reference display altitude (RefAlt(t)) to the instantaneous value of the altitude of the aircraft (a/c alt(t)).

13. The device as claimed in claim 1, characterized in that, when the aircraft was descending at the moment of the detection of a risk of terrain collision and when its instantaneous altitude (a/c alt(t)) becomes less than the last value taken by the reference display altitude (RefAlt(min)), the means for adjustment of the reference display altitude slave the value of the reference display altitude (RefAlt(t)) to the instantaneous value of the altitude of the aircraft (a/c alt(t)).

14. The device as claimed in claim 1, characterized in that the means for adjustment of the reference display altitude switch instantaneously, at the moment of the disappearance of a risk of terrain collision, between the value of the altitude related to the instantaneous altitude (a/c alt(t)) of the aircraft and the value of the short term predicted altitude for the aircraft (predicted a/c alt(Tw)).

15. The device as claimed in claim 14, characterized in that the switching is triggered at the start of a next cycle of refreshing of the image on the screen or is displayed the image.

16. The device as claimed in claim 1, characterized in that the means for adjustment of the reference display altitude allow a gentle switching, onward of the moment of the disappearance of a risk of terrain collision, between the value of the altitude related to the instantaneous altitude (a/c alt(t)) of the aircraft and the value of the short term predicted altitude for the aircraft (predicted a/c alt(Tw).